

In the Claims:

1. (currently amended) In a communication system having a plurality of microphones at a transmitting location transmitting signals over separate corresponding plurality of channels to corresponding speakers in a receiving location and a plurality of microphones at the receiving location coupled over corresponding plurality of channels to speakers at the transmitting location generating echo signals, a multi-channel acoustic cancellation system comprising:

filter means coupled to output of said plurality of microphones at said transmitting location and input to said plurality of speakers at the receiving location for providing estimated signals representing estimates of echo path responses from said plurality of microphones from said receiving location to said plurality of speakers at said transmitting location;

means coupled to input of said plurality of speakers at said transmitting location and output of said microphones at said receiving location for providing true signals representing true echo signal;

means for subtracting said true signals from said estimated signals to reduce echo signals and to obtain coefficient control signals representing errors;

means for coupling said coefficient control signals to said filter means to change the filter coefficients to minimize said errors; and

means for providing decorrelation of said signals using all-pass filters in said channels having different time varying filtering parameter; said time varying filtering parameter being a bounded random variable.

2. (canceled)

3. (previously amended) The system of Claim 1 wherein said bounded random variable has bounded values based on data for just noticeable time delay difference from psychoacoustics.

4. (original) The system of Claim 3 where the just noticeable delay is between 30 and 200 microseconds.

5. (original) The system of Claim 1 where the filter means include finite impulse response (FIR) filters that have filter coefficients updated adaptively depending on the input signals to the loudspeakers and outputs of the microphones.

6. (currently amended) A multi-channel acoustic cancellation system comprising:

filter means coupled to output of a plurality of microphones at a transmitting location transmitting signals over separate corresponding plurality of channels to corresponding plurality of speakers in a receiving location and input to a said plurality of speakers at a said receiving location for providing estimated signals representing estimates of echo path responses from a plurality microphones from said receiving location to a plurality of speakers at said transmitting location;

means coupled to input of said plurality of speakers at said transmitting location and output of said plurality of microphones at said receiving location for providing true signals representing true echo signal;

means for subtracting said true signals from said estimated signals to reduce echo signals and to obtain coefficient control signals representing errors;

means for coupling said coefficient control signals to said filter means to change the filter coefficients to minimize said errors; and

means for providing decorrelation of said transmitting signals in said separate corresponding plurality of channels by providing an all-pass filter having different time varying filtering parameter in each channel wherein said time varying filtering parameter takes a bounded random variable.

7. (canceled)

8. (previously amended) The system of Claim 6 wherein said bounded random variable has bounded values based on data for just noticeable time delay difference from psychoacoustics.

9. (original) The system of Claim 8 where the just noticeable delay is between 30 and 200 microseconds.

10. (previously amended) A multi-channel acoustic cancellation system comprising:

means coupled in a signal path between a transmitting location and a receiving location for reducing echo errors and means in said path for providing decorrelation of signals in separate corresponding plurality of channels by providing an all-pass filter having different time varying parameter in each channel wherein said time varying filtering parameter takes a bounded random variable.

11. (canceled)

12. (previously amended) The system of Claim 10 wherein said bounded random variable has bounded values based on data for just noticeable time delay difference from psychoacoustics.

13. (original) The system of Claim 12 where the noticeable delay is between 30 and 200 microseconds.